

SEQUENCE LISTING

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 PINILLA, Clemencia

<120> Isolated, SSX-2 and SSX-2 Related Peptides Useful as HLA Binders  
 and CTL Epitopes, and Uses Thereof

<130> LUD 5739 PCT

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 <151> 2002-07-31

<160> 116

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Phe Leu Trp Gly Pro Arg Ala Leu Val  
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Val Arg Ile Gly His Leu Tyr Ile Leu  
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Tyr Leu Gln Leu Val Phe Gly Ile Glu Val  
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Phe Leu Trp Gly Pro Arg Ala Leu Val  
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Glu Val Asp Pro Ile Gly His Leu Tyr  
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Glu Ala Asp Pro Thr Gly His Ser Tyr  
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Tyr Arg Pro Arg Pro Arg Arg Tyr  
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Leu Ala Met Pro Phe Ala Thr Pro Met  
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Tyr Tyr Trp Pro Arg Pro Arg Arg Tyr  
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Ala Ala Arg Ala Val Phe Leu Ala Leu  
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Thr Gln His Phe Val Gln Glu Asn Tyr Leu Glu Tyr  
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Ser Leu Leu Met Trp Ile Thr Gln Cys Phe Leu  
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Ala Glu Leu Val His Phe Leu Leu Leu Lys Tyr Arg Ala Arg  
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Ala Glu Leu Val His Phe Leu Leu Leu Lys Tyr Arg Ala Arg  
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Glu Tyr Val Ile Lys Val Ser Ala Arg Val Arg Phe  
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Leu Leu Lys Tyr Arg Ala Arg Glu Pro Val Thr Lys Ala Glu  
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Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser Gly Asn Ile Leu Thr  
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Ala Ala Asp His Arg Gln Leu Gln Leu Ser Ile Ser Ser Cys Leu Gln  
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Tyr at position 8  
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Ala Ala Ala Pro Lys Gln Phe Leu Ala  
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<210> 60  
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Tyr at position 8  
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Ala Ala Ser Pro Lys Ser Phe Thr Leu  
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Tyr at position 8  
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Val Ser Ala Pro Lys Val Phe Gln Ala  
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Tyr at position 8  
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Ile Ala Ser Pro Lys Ala Thr Tyr Val  
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Tyr at position 8  
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Val Ser Ala Pro Lys Ile Phe Gln Ala  
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Tyr at position 8  
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Asn Ser Leu Pro Lys Val Ala Tyr Ala  
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Tyr at position 8  
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Ala Ser Leu Pro Lys Val Ser Tyr Val  
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Lys Ala Glu Pro Lys Ala Pro Tyr Ala  
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Tyr at position 8  
<400> 67

His Ser Leu Pro Lys Val Ser Tyr Ala  
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<210> 68  
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Tyr at position 8  
<400> 68

Thr Ala Ser Pro Lys Glu Phe Tyr Ala  
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<210> 69

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 Tyr at position 8  
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Ala Ser Val Pro Lys Glu Leu Tyr Leu  
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 Tyr at position 8  
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Ser Pro Asp Pro Lys Ile Cys Tyr Val  
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 Tyr at position 8  
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Val Ala Glu Pro Lys Glu Ser Tyr Val  
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 Tyr at position 8  
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Ile Ser Ala Pro Lys Ile Phe Arg Val  
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Tyr at position 8  
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Ala Val Tyr Pro Lys Ile Phe Tyr Val  
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<210> 74  
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Tyr at position 8  
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Lys Ala Ser Glu Lys Ile Ile Tyr Val  
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<210> 75  
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Tyr at position 8  
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Val Gln Asp Pro Lys Val Thr Tyr Leu  
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Tyr at position 8  
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Cys Pro Val Pro Lys Ile Phe Tyr Val  
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Tyr at position 8  
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Phe Ala Lys Pro Lys Ile Thr Tyr Val

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5

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Tyr at position 8  
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Gln Thr Pro Pro Lys Ile Asp Tyr Leu  
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Tyr at position 8  
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Leu Arg Ser Pro Lys Leu Phe Tyr Ala  
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<210> 80  
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Tyr at position 8  
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Lys Tyr Ser Glu Lys Ile Ser Tyr Val  
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<210> 81  
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Tyr at position 8  
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Glu Gln Lys Pro Lys Asp Phe Tyr Ala  
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<210> 82  
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 Tyr at position 8  
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Arg Thr Thr Pro Lys Asp Phe Tyr Val  
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 Tyr at position 8  
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Arg Ala Asp Pro Lys His Lys Tyr Leu  
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 Tyr at position 8  
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<210> 85  
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 Tyr at position 8  
 <400> 85

Thr Ser Ser Trp Lys Lys Phe Tyr Leu  
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<210> 86  
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Tyr at position 8  
<400> 86 .

Leu Ser Arg Pro Lys Arg Phe Tyr Leu  
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<210> 87  
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Tyr at position 8  
<400> 87

Asn Thr Tyr Pro Lys Gly Phe Tyr Cys  
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<210> 88  
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Tyr at position 8  
<400> 88

Ser Lys Leu Pro Lys Asp Phe Tyr Asp  
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<210> 89  
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criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8  
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<210> 90  
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criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8  
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Lys Val Asp Pro Lys Pro Phe Tyr Glu  
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<210> 91  
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 Tyr at position 8  
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Val Gly Ser Glu Lys Leu Phe Tyr Glu  
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<210> 92  
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 Tyr at position 8  
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Leu Met Thr Pro Lys Gln Met Tyr Glu  
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<210> 93  
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 Tyr at position 8  
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Lys Asn Lys Pro Lys Met Asn Tyr Glu  
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<210> 94  
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 Tyr at position 8  
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Val Arg Gly Pro Lys Tyr Phe Tyr Gly  
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<210> 95  
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 Tyr at position 8  
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Ala Ala Thr Pro Lys Ile Phe Asn Gly  
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<210> 96  
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 Tyr at position 8  
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Trp Gly Glu Pro Lys Thr Trp Tyr Gly  
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<210> 97  
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 Tyr at position 8  
 <400> 97

Val Gly Leu Lys Lys Ser Phe Tyr Gly  
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<210> 98  
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 Tyr at position 8  
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Leu Ala Asn Pro Lys Glu Phe Tyr His  
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<210> 99  
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 <212> PRT  
 <213> Artificial  
 <220>  
 <223> Peptides with nine amino acids wherein two of the following  
 criteria in is satisfied: Lys at position 5; Phe at position 7; or  
 Tyr at position 8

<400> 99

Ala Ser Ser Pro Lys Val Ala Tyr His  
1 5

<210> 100

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 100

Gln Tyr Thr Pro Lys Ala Lys Tyr His  
1 5

<210> 101

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 101

Gln Thr Gly Pro Lys Ser Thr Tyr Ile  
1 5

<210> 102

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 102

Ser Met Asp Pro Lys Arg Phe Tyr Lys  
1 5

<210> 103

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 103

Gly Ile Thr Pro Lys Gly Phe Tyr Lys  
1 5

<210> 104  
 <211> 9  
 <212> PRT  
 <213> Artificial  
 <220>  
 <223> Peptides with nine amino acids wherein two of the following  
 criteria in is satisfied: Lys at position 5; Phe at position 7; or  
 Tyr at position 8  
 <400> 104

Arg Leu Val Pro Lys Leu Phe Tyr Lys  
 1 5

<210> 105  
 <211> 9  
 <212> PRT  
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 <220>  
 <223> Peptides with nine amino acids wherein two of the following  
 criteria in is satisfied: Lys at position 5; Phe at position 7; or  
 Tyr at position 8  
 <400> 105

Pro Ser Ser Pro Lys Val Thr Tyr Lys  
 1 5

<210> 106  
 <211> 9  
 <212> PRT  
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 <220>  
 <223> Peptides with nine amino acids wherein two of the following  
 criteria in is satisfied: Lys at position 5; Phe at position 7; or  
 Tyr at position 8  
 <400> 106

Glu Asp Glu Tyr Lys Ala Phe Tyr Lys  
 1 5

<210> 107  
 <211> 9  
 <212> PRT  
 <213> Artificial  
 <220>  
 <223> Peptides with nine amino acids wherein two of the following  
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 Tyr at position 8  
 <400> 107

Thr Leu Gly Pro Lys Ile Thr Tyr Gln  
 1 5

<210> 108  
 <211> 9  
 <212> PRT  
 <213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 108

Glu Lys Glu Gly Lys Pro Phe Tyr Gln  
1 5

<210> 109

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 109

Val Ala Gln Pro Lys Glu Val Tyr Arg  
1 5

<210> 110

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 110

Glu Ala Gly Pro Pro Ala Phe Tyr Arg  
1 5

<210> 111

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 111

Gln Ile Asn Pro Lys Cys Phe Tyr Thr  
1 5

<210> 112

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 112

Asp Ile Pro Pro Lys Phe Phe Tyr Thr  
1 5

<210> 113

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 113

Asp Asp Asn Pro Lys Thr Phe Tyr Trp  
1 5

<210> 114

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 114

Asp Ala Val Pro Lys Ile Glu Tyr Tyr  
1 5

<210> 115

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 115

Val Ile His Glu Lys Gly Phe Tyr Tyr  
1 5

<210> 116

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptides with nine amino acids wherein two of the following  
criteria in is satisfied: Lys at position 5; Phe at position 7; or  
Tyr at position 8

<400> 116

Gly Ile Leu Gly Phe Val Phe Thr Leu  
1 5